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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/407,218	09/27/1999	YURI A. BABROV	A-70977/AJT/TJH	2465

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EXAMINER

NOLAN, SANDRA M

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 02/12/2004

22

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/407,218

Applicant(s)

BABROV ET AL.

Examiner

Sandra M. Nolan

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 and 24-26 is/are allowed.
- 6) ☒ Claim(s) 11-19 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 21.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 24 December 2003 (Paper No. 20) has been entered.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 24 December 2003 (Paper No. 21) was considered by the examiner.

Note that SU 1015326A was not considered. It is in Russian and its materiality was not discussed in Paper No. 20.

### ***Claims***

3. Claims 11-26 are pending.

### ***Summary of Base Claims***

4. Base claims 11, 13 and 20 were summarized in the statement of reasons for allowance given in the office action dated 15 September 2003 (Paper No. 19).

### ***Allowable Subject Matter***

5. Claims 20 and 24-26 are allowed.

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The prior art of record fails to teach or suggest the reflector/plate/polarizer construct recited in claims 20 and 24-26.

***Withdrawal of Allowance***

6. The allowance of claims 11-19 and 21-23 is hereby withdrawn in order to apply the ground of rejection set out below.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 11-19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shen et al (US 5,738,918) in view of Omeis et al (US 5,247,377) and JP 4307300A2 (English abstract).

All of the references applied in this rejection were supplied to the examiner in Paper No. 21.

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Shen teaches liquid crystal (LC) displays having the structure: polarizer/LC cell/polarizer, having the LC element sandwiched between polarizing films (col. 1, lines 23-28).

It fails to teach the use of anisotropic LC substances in the LC cell or the use of regions in the anisotropic material that differ by phase shift values and/or direction of fast optical axis.

Omeis teaches the use of anisotropic substances in LC cells (col. 1, line 38) within displays (col. 1, lines 10-41). The anisotropic substances can be tempered to orient them in a desired manner (col. 7, lines 8-11).

JP 43073300A2 (hereafter JP '300A2) teaches that stained glass effects can be achieved by placing a phase differing plate between two polarizing plates in a light polarizing display. See the title and the "purpose" and "constitution" sections of the abstract.

The references are analogous because they all deal with light polarizing displays.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the anisotropic LC substances of Omeis and the phase differing plates of JP 200A2 as the LC plate in Shen's structure in order to produce LC displays having the orientable middle layer (per Omeis) that gives stained glass effects (per JP 200A2) when polarized.

The motivation to employ the orientable anisotropic cells of Omeis is found at col. 7, lines 8-11 of Omeis, where it teaches that the anisotropic substances can be tempered to orient them in a desired manner.

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The motivation to employ the phase differing plate of JP 200A2 is found in the title and purpose section of the abstract, where stained glass effects are taught.

It is deemed desirable to make stained decorative materials using polarizable LC systems instead of cut glass in order to make production easier and less hazardous.

**Conclusion**

Any inquiry concerning this communication should be directed to the Examiner, Sandra M. Nolan, whose telephone number is 703/308-9545. The Examiner can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the Examiner by telephone are unsuccessful, her supervisor, Harold Pyon, can be reached at 703/308-4251. The general fax number for the art unit is 703/305-5436. The fax number for after final communications is 703/872-9310. The receptionist answers 703/308-0661.



S. M. Nolan  
Patent Examiner  
Technology Center 1700

SMN/smn  
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